K08/143

BioMers

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MAY - 2 2008

510(k) Summary (per 21 CFR 807.92)

I. Applicant

> BioMers Products, LLC. 2316 Pine Ridge Road, Suite 459 Naples, FL, 34109

Contact Person: George Aliphtiras, Vice President of Operations

> Tel: (239) 776-6344 Fax: (239) 213-0062

Email: george@biomersbraces.com

Date Prepared: December 19, 2007

II. Device Name

> Proprietary Name: BioMers Translucent Orthodontic Wire

Common/ Usual Name: Orthodontic wire

Classification Name: Orthodontic appliance and accessories

872.5410 Regulation Number: Product Codes: DZC

Classification: Ι

Classification Panel: Dental

III. **Predicate Device**

The BioMers Translucent Orthodontic Wire is substantially equivalent to the Optiflex from Ormco Corp. and the Super Elastic Nickel Titanium Arch Wire from Acme Monaco Corp. The Optiflex was cleared by the FDA on September 15, 1989 under 510(k) K894781. The Super Elastic Nickel Titanium Arch Wire is exempt from 510(k) filings.

IV. Intended Use of the Device

The BioMers Translucent Orthodontic Wire is indicated for use as an orthodontic arch wire to provide force to the teeth to effect movement in the early (leveling and aligning) stage of orthodontic treatment.

V. **Description of the Device**

The BioMers Translucent Orthodontic Wire is a translucent arch wire comprised of glass fibers, a polymer composite resin, and a polymer coating. The embedded glass fibers function as the reinforcement, providing the necessary force to straighten teeth. The translucent polymer composite resin serves as the matrix, binding together the individual glass fibers. The outer coating, made of a USP Class VI polycrystalline and amorphous linear polymer, increases the abrasion resistance properties of the wire.

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VI. Summary of the Technical Characteristics

The BioMers Translucent Orthodontic Wire is an orthodontic arch wire used to provide force to the teeth to effect movement in the early (leveling and aligning) stage of orthodontic treatment. The BioMers Translucent Orthodontic Wire was designed and tested using the following standards:

- ASTM D 790 03 Standard test methods for flexural properties of unreinforced and reinforced plastics and electrical insulating materials
- ASTM D 3916 02 Standard test method for tensile properties of pultruded glass fiber reinforced plastic rods
- ASTM D 570 98 (Reapproved 2005) Standard test method for water absorption of plastics

VII. Safety & Effectiveness

There are no known substantial differences between the BioMers Translucent Orthodontic Wire defined in this 510(k) submission and the predicate devices. They have the same intended use and any differences in technological characteristics do not raise issues of safety and effectiveness.



Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

MAY - 2 2008

BioMers Products, LLC C/O Mr. Daniel W. Lehtonen Responsible Third Party Official Intertek Testing Services NA, Incorporated 2307 East Aurora Road, Unit B7 Twinsburg, Ohio 44087

Re: K081143

Trade/Device Name: BioMers Translucent Orthodontic Wire

Regulation Number: 21 CFR 872.5470

Regulation Name: Orthodontic Plastic Bracket

Regulatory Class: II

Product Code: DYW, DZC Dated: April 21, 2008 Received: April 22, 2008

Dear Mr. Lehtonen:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0115. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address http://www.fda.gov/cdrh/industry/support/index.html.

Sincerely yours,

Chiu Lin, Ph.D.

Director

Division of Anesthesiology, General Hospital, Infection Control and Dental Devices

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Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure

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4.	Indi	cation	for	Use	Staten	nent

	510(k) Number (if known):							
	Device Name:	BioMers Transluce	nt Orthodontic Wire					
	Indications for Use:		·					
	 An orthodontic arch wire used to provide force to the teeth to effect movement in the early (leveling and aligning) stage of orthodontic treatment. 							
				•				
	Prescription Use X (Part 21 CFR 801 Subpart D)	AND/OR	Over-The-Counte (21 CFR 801 Su	er Use				
	(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)							
	Concurrence of CDRH, Office of Device Evaluation (ODE)							
	(Division Sign-Off) Page 1 of							
•	Division of Anesthes Infection Control, De	iology, General Hospit ntal Devices	al					
		K081142						

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